99-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	數位空間設計(二)	Serial No. / ID	2303 / SPD3063
Dept.	空間設計學系	School System / Class	大學日間部3年1班
Lecturer	林志峰	Full or Part-time	專任
Required / Credit	Optinal / 2	Graduate Class	No
Time / Place	(五)56 / G302	Language	Chinese

Introduction

Spatial information science is the integrated science of spatial phenomenon and information technology. The purpose of this course is designed to help students understand the theory of spatial information and data computing methods of digital analysis. Students could learn spatial information analysis software technology, and the theory of spatial analysis used to discuss phenomenon interpretation and the capacity of environment design.

Outline

Courses divided into three following main parts:
(A) Introduction of spatial information:
(1) the theory of spatial information science background
(2) analysis of spatial information science applications

(B) the spatial digital analysis theory:
(1) space syntax analysis theory Introduction.
(2) spatial digital analysis , software teaching:
a. axial line analysis: analysis of spatial accessibility
b. visibility graph analysis: point of view, as the ability to visual-link to each other
c. crowds simulation (agents counts): analysis software depthmap
(3) spatial digital analysis and Interpretation of spatial design

(C) geographic information system (GIS) analysis theory and its software:
(1) an overview of geographic information system development
(2) The application of geographic information system analysis
(3) Teaching geographic information system analysis software (analysis software MapInfo, ARCGIS)

Prerequisite

1. The basic graphic and computer graphic capability
2. The observation of spatial phenomena
3. The interpretation of spatial design